

Corporate culture in a multicultural context:
Analysis of signs of speech connected to cultural metaphors

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With globalization, techniques and current tools of communication erase physical borders. Consequently, either the specific enculturation to each people or population remains intact if not reinforced, or the bringing together of cultures wipes out diversity and creates hybrid cultures.

Problem

How is the influence of the local culture of a company on the corporate culture ?

Between a parent company and its subsidiaries located in different countries even different continents, differences are easily observable in manager practices, in products, external communication media and oral speeches. On the other hand, we ignore if such differences can be pinpointed in communication media. Does the corporate culture erase the differences from the local culture ?

More particularly, do differences exist between the speeches written by a parent company located in X country and those of its subsidiary(ies) established in Y country ? And if so, what do these differences express and how can we interpret them in terms of values, traditions, experience... Can we demonstrate that the corporate culture is not only, "a set of collective representations located in the mind of the members of the company or some sort of set of symbolic systems" (Delavalée 1995: 12) but that it expresses the identical, national, or local differences of culture within multinational companies?

« The company, as social organization, needs reference points in terms of real and symbolic image, going of the name, the logo, the address, up to the clothing holding, by way of " the invention " of a common language (together words, signs, abbreviations, abbreviations). This language is more or less specialized, technical, slang, the merit of which is to create an identity » (Renai on 2005: 299).

Sainsaulieu says for that purpose that « the identity creates the community, in the sense where this one defines itself by a concerted action, the very basis of action theory in sociology » (Sainsaulieu on 1985: 36).

Is it possible to discriminate the speech of a subsidiary company from that of the mother company when companies convey their own values and identity? Is the corporate language, in reference to its own culture, the same one according to whether the transmitter of the message is member of the mother company, or of its subsidiary ?

In order to highlight similarities or discordances in the impregnated corporate culture speeches, our study consists in analyzing a corpus of written texts such as mission reports or internal reports (fig. 1) between French companies and their subsidiary companies in Senegal. In the respect of a total confidentiality, we have removed from the corpus all data related to corporate names and person names. In order not to distort the analyses, all statistical data were also removed.

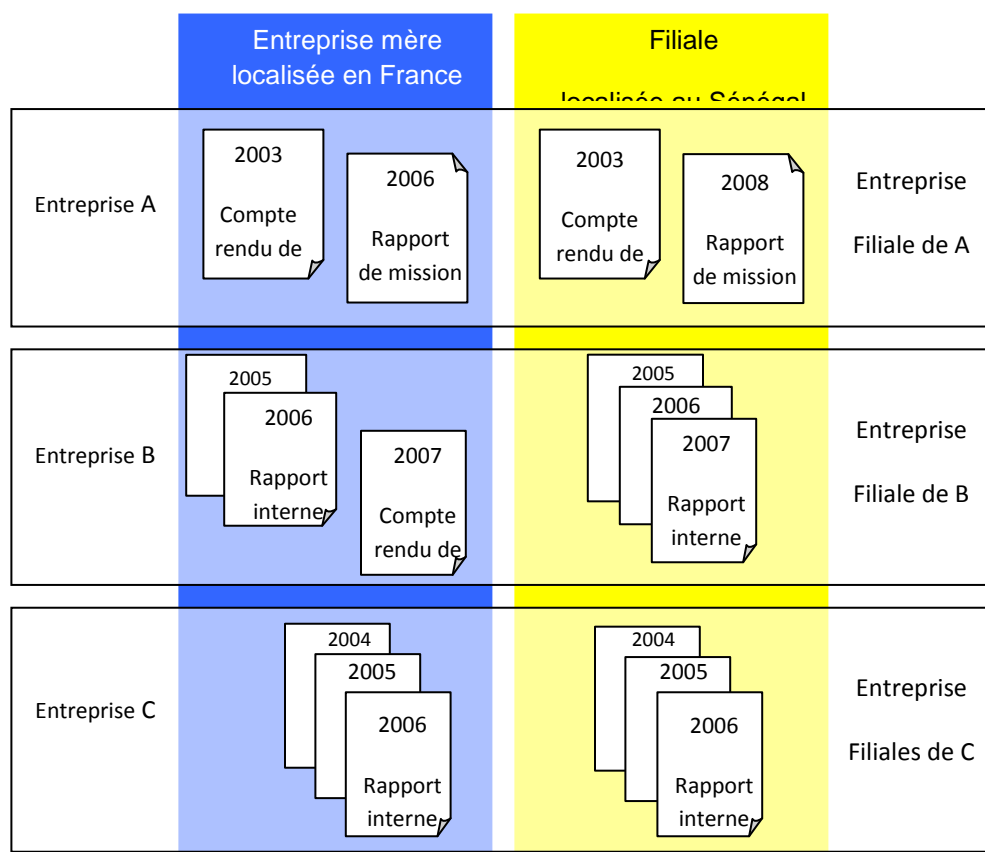


Fig. 1 : composition of corpus

Communication in Senegal

The Senegalese live in a society of oral tradition. They grant only very little importance to written documents. In the company, written documents of intern communication are far from numerous. Only big companies are beginning to set up tools of intern communication and to circulate documents within the company.

In Africa, the common sense reduces generally communication to information as if these two notions had the same meaning, the same weight, the same effects. In its strict meaning, the information means the means with which are endowed a society, a state, an organization to collect and spread news and knowledge. In a wider sense, the information translates the understandable initiative of the public in the event or in the facts of current events, in the objectivity and the neutrality. Theoretically, without these two preliminary, the information moved in propaganda. These characteristics create the limits of the border between the information and the communication (Traoré on 2005: 5).

There exists furthermore, in Senegal, a number of factors which do not facilitate communication.

The connections of hierarchy at work sometimes come to upset the considerations of north-south rivalry, and tribalistic or ethnic manners. It is the example of a foreman with a smith's caste background managing noble persons.

Submission and respect for the leader is transposed by the village community towards the company. The hierarchy in the company is very marked and it is inconceivable to say to one's superior that one has not

understood such message or such instruction because it is considered as a lack of respect to the chief. We can imagine the consequences this can have on the efficiency of internal communication in the company.

Koro is a bambara word and means big brother or big sister. This concept shows the respect for the older one. This practice has direct consequences on the hierarchical links in the company. So a young manager finds it difficult to manage older persons than him. The older is the only one to detain more experience, more knowledge. This element can also hinder good communication in the company. The metaphor of family still applies to Senegalese companies. The leader is often considered as the protective patriarch. Numerous companies have moreover a business name declined as "something and son" or " something and brothers ".

The Senegalese, whatever their religious conviction and their educational level, believe in the power of marabouts and other fetishists, and in fate. Thus, in the company, certain members of staff are so to speak "untouchable" by the simple fact that they are endowed with powers by the marabouts. They are feared. Resorting to occult forces can block work ethics and go as far as putting the company in a crisis. In the name of fate, the Senegalese can adopt a passive attitude and undergo a situation rather than try to change things, which is useless according to them, because that is the way it is. « It plays naturally on the productivity at the same time as on the communication as far as the message of the marabout becomes dominating in front of that of the company » (Traoré on 2005: 18).

The notion of time, for Senegalese people drives them to take their time. « Try and make an African understand that "time is money" and you will waste your time » (Traoré on 2005: 20). It is thus common to begin a meeting with one hour or two hours' delay in Senegal, but nobody is scandalized or needs to apologize. It is not rare either for meetings to go on widely and for discussions to linger over irrelevant topics. Let us note here that exchanges are made for the greatest part orally. We can even consider African society, and thus the Senegalese for our purpose as an oral society.

Considering all these observations, it was very difficult for us to gather all the elements of the corpus, on the one hand, because of their recurring absence explained by all the reasons above. On the other hand, when they exist, the leaders were reluctant to reveal strictly confidential information. We are obviously committed to respect in its entirety the confidentiality of the data.

The three companies we analyse belong to the service sector. We have chosen Senegal because :

- this country constitutes a ground of investment for the French companies,
- the differences of culture with France are important,
- this country is French-speaking; we so free ourselves from problems of translation.

Lexicometric analysis

Our methodology relies on a technique of rigorous discrimination in application in textual corpuses and tries to free itself from the contents to seize the characteristics of shape, style from the statistical distributions of vocabulary. Lexicostatistics, defined by Lowe and Matthews (on 1995: 92), - still called " stylistic statistics " - consists in applying mathematical methods to extract quantitative data of a text, data studied by the lexicostatistics being the words.

According to David I. Holmes (on 1994: 89), « no stylostatistician still succeeded in establishing a methodology which manages to seize better the style of a text than the one who leans on lexical elements». Holmes asserts that there are no better parameters to compare objectively authors between them: « the lexical level is suited to realize stylistic analyses, because the questions about the style are essentially comparative and because there are more data at the lexical level than at quite other level in the shape of calculated concordances ». Through this type of analysis, we are willing to highlight the characteristics of the writing of a culture and the differences which allow to distinguish the styles of

writing of a culture from another.

The stages of our analysis are detailed in figure 2.

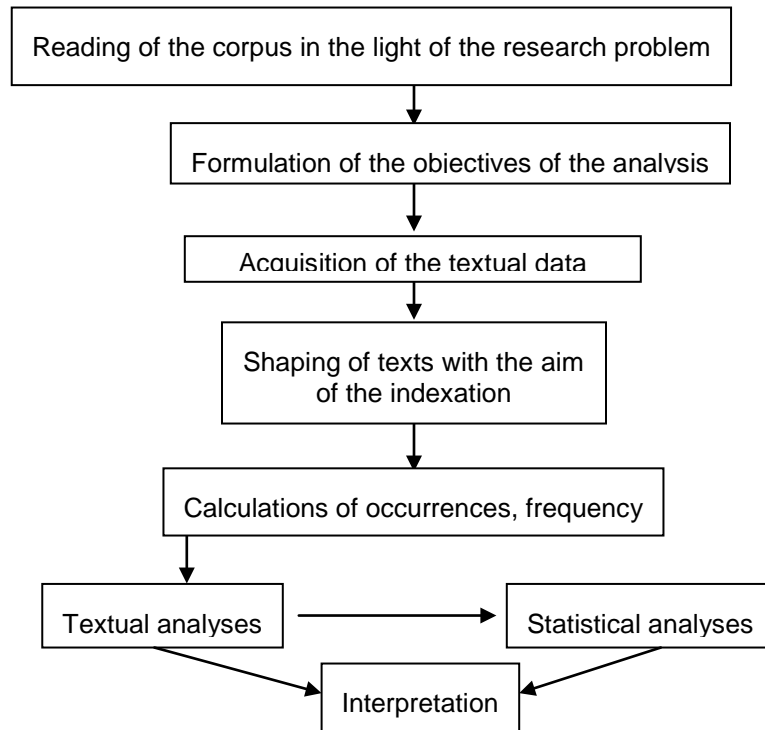


Fig. 2. Stages of the lexicostatistics analysis

The analysis of textual data presents the advantage, compared to a more traditional analysis of contents, a real objectivity in substitutes' production lexical as the lists of more or less frequent words, the co-occurrences, the cards of lexical association ...

As indicated in figure 2, once the established corpus and the defined objectives of analysis, texts undergo a shaping and an indexation before being treated and analyzed.

The data processing run of the elaborate data is supported by the application developed by Etienne Brunet : Hyperbase. HYPERBASE software first appeared in 1989. Defined by its designer as a " statistical hypertext ", hyperbase is a tool intended for the retrieval and statistical systems of the textual corpuses. The software rests on the statistical laws and the lexicostatistics techniques.

Hyperbase, which enters the family of hypertexts, distinguishes itself however from traditional products due to:

- exhaustiveness of the indexation, which takes into account all the words (inclusive punctuations),
- adaptation of the routines of sorting and search to the European alphabets,
- variety of the filters of interrogation, options of treatment and the obtained results,
- accessibility of the dictionary and the text which are plainly reproduced
- flexibility and the conviviality of the exploitation,
- statistical orientation given to the product. A comparison is made with the corpus of the Treasury of the French language.

The use of the software increases the analysis in speed, in rigour while allowing a good flexibility of the data. These various analyses make it possible to study the vocabulary, the style of an author, the one time writing, and especially the comparison between various authors.

“*Hyperbase* was until now used in the mainly literary corpuses (for example the work of Rabelais, Diderot, Julien Gracq or the entirety of *human Comedy*). But its application has extended to the legal, historical, advertising texts or even to surveys or public opinion polls. Even if it can treat quickly and effectively short texts, its best performance is reached in the great corpora (beyond the million words). ” (Brunet on 2002: 14)

The program consists of two parts:

- the retrieval system and the lexicostatistics analysis based on the calculation of the reduced distance,
- the mathematics analysis, the normal law, the test of Chi 2 and the factorial analysis of the correspondences.

The necessity of comparing texts on quantitative bases implies the definition of a standard to isolate, as L. Lebart and Has. Salem explain (on 1994: 141), of the textual chain the various units which the enumerations are going to concern. « The operation which allows to cut the text in minimal units (that is in units which we shall not decompose further) is called the segmentation of the text. This phase, which allows to crumble the text in different units is followed by the grouping of identical units: the phase of identification of the textual units ».

The analytical treatment of the corpus by *Hyperbase* allows us to distinguish the common points and the differences of each text, at the level of the structure, as well as the style and the lexical contents.

Lexical richness

Considering as "rich" or "poor " the vocabulary of a text, an author, is according to Charles Muller (1992: 34) a " quite subjective appreciation moreover which bases itself generally on no sure datum, and which translates rather the presence in the text of some words considered rare, or on the contrary the absence of such elements of the lexicon. »

Paul Caro (on 1990: 28) explains that the active vocabulary of a Frenchman who left school quite early would be about 900 words (400 for an American, English being more concise), that a reader of popular newspaper uses 1500 words, the average reader of a quality newspaper about 3500 words.

The cultural difference is thus marked quantitatively.

Hyperbase calculates the lexical wealth according to four parameters:

- the size of the corpus
- the size of the text
- the frequency of the word in the corpus
- the frequency of the word in the text

The lexical variety (or lexical poverty) of a text is an essential parameter of readability. The basic principle is the following : the author has a certain number of words which we can qualify as a given "bank" of words, and among this one, he privileges some to the detriment of others. A sample of the internal communication of a company would therefore reflect the culture of the company.

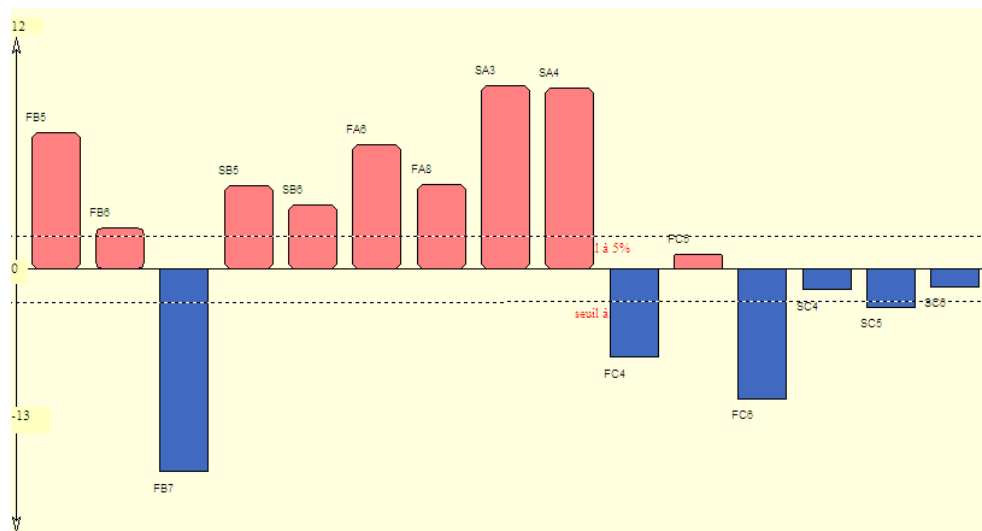


Fig. 3: histogram of lexical richness of the corpus

The data of the table are calculated by a program on hyperbase following the statistics law according to Charles Muller's method. They are represented in the form of histogram. Histograms restore the probability calculated in the field previously reserved for the reduced gaps. Figure 3 represents the 3 lexical richness of each text composing the corpus. The names of texts are coded in the following way: two letters followed by a figure; the first letter indicates F for France and S for Senegal, the second letter indicates the company according to A, B or C, and the figure corresponds to the year, for example 7 for 2007.

The graph of figure 3 highlights texts using common language, and whose words are common to various texts (in blue) and also texts including less common, more specific words to the texts in which they are present. This first analysis shows that A and B companies possess richer, less neutral internal documents, than company C.

Lexical distance

Hyperbase follows the Jacquart method based on the study of frequencies by considering a word by its presence or its absence. When we try to appreciate the lexical connection of two texts, a word contributes to move closer to these two texts if it is common to both and to increase the distance if it is privative and is met in only one of them. (see fig 4).

Subject to chances bound to hapax, to key errors this method of calculation was revised by taking into account Dominique Labbé's works (on 1990: 92), notably those on the speeches of the politicians, who proposed, in 2000, in the *Colloquium JADT 2000 of Lausanne* « an effective algorithm which for every word appreciates the real distribution of the frequencies in both texts by comparing it either with the theoretical distribution but maximal possible gap in this distribution ».

Hyperbase makes an analysis based on the lexical distances on the occurrences. The raised analysis allows to show diagrammatically lexical distances between the various texts composing the corpus on the oblong representation below.

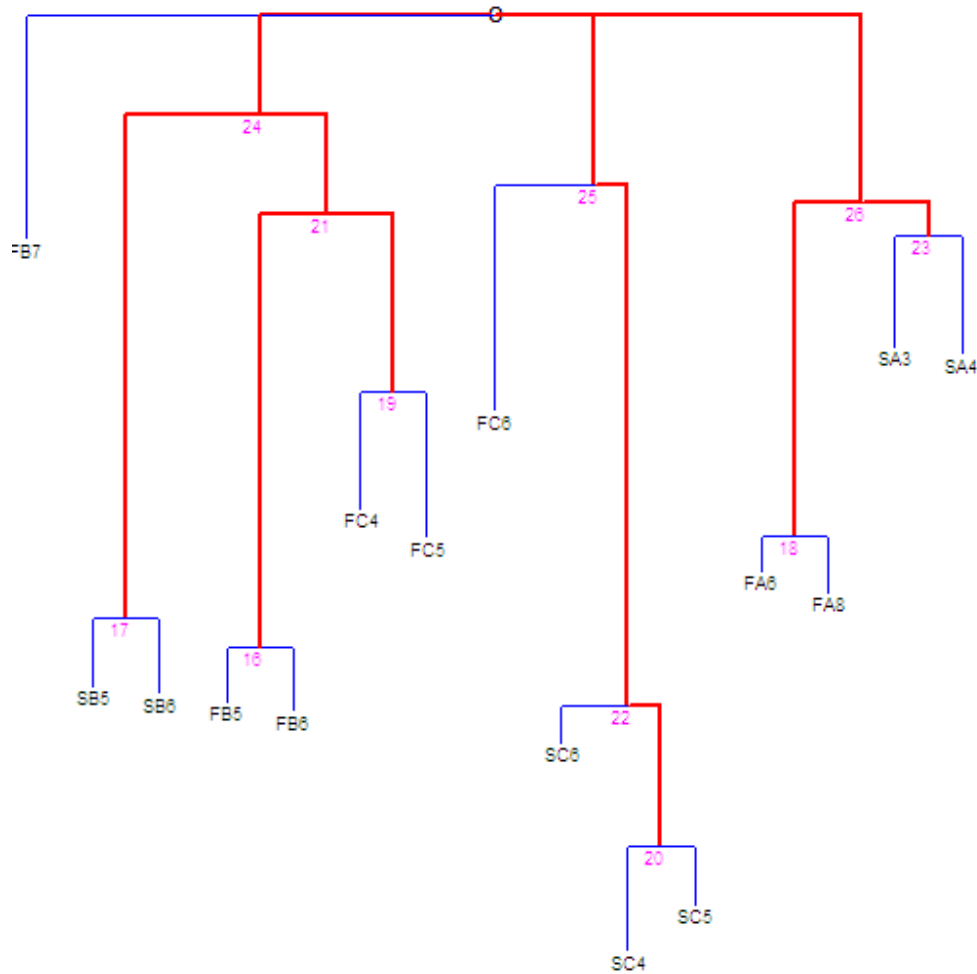


Fig. 4: rectangular representation of the analysis raised of the lexical distances on the occurrences

We observe on the tree of figure 4 three branches stemming from the central node :

- in black, the texts of company A
- in light grey, the texts of company B
- in dark grey, the texts of company C.

Each of these branches presents a dichotomy with on one side, in blue, the texts of parent companies situated in France, and in yellow, the texts of subsidiaries situated in Senegal.

However, the relative position of three texts, FB7, FC4 and FC5 raises problem.

The interpretation of these results shows, on the one hand, that we can identify, in written internal documents of the companies, lexical characters common to the same company (mother firm and its or its subsidiary companies). These common elements are the reflection of the corporate culture. The interpretation of these same results shows, on the other hand, that we can identify, in the internal written documents of the same company, lexical characters common to a country. These common elements are the reflection of the local culture.

The anarchistic position by FB7 is explained by the fact that the document is of different nature with regard to FB5 and FB6.

The anarchy positions of FC4 and FC5 probably explain the fact that these two texts are respectively 46

times and 12 times as big as the smallest of the texts of the corpus, as we can observe it on the following graph.

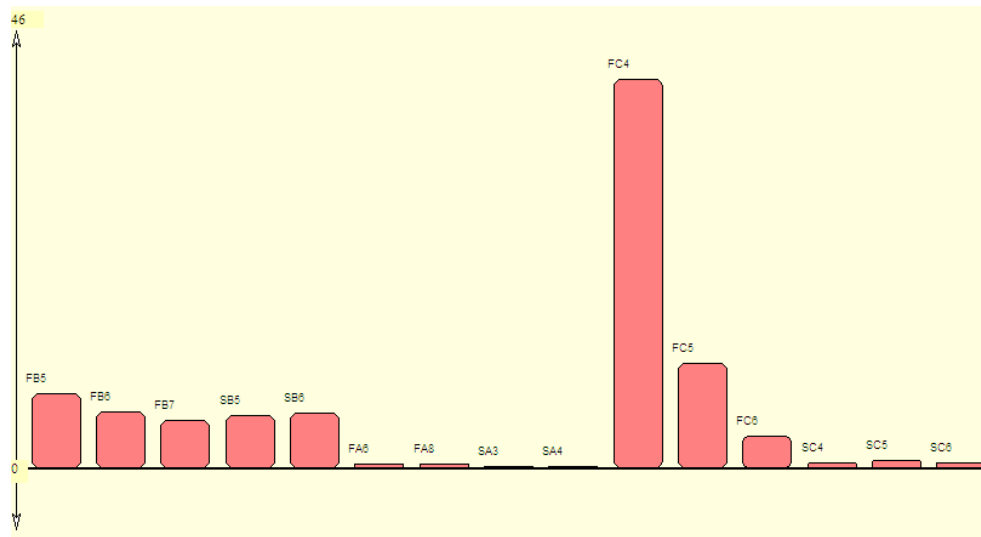


Fig. 5: histogram of the extent of the texts of the corpus

To refine the results and push our interpretations further, we pursue our analyses by means of the application Sphinx Lexica which helps in the location, codification and organization of the ideas of the text, as well as in their synthesis.

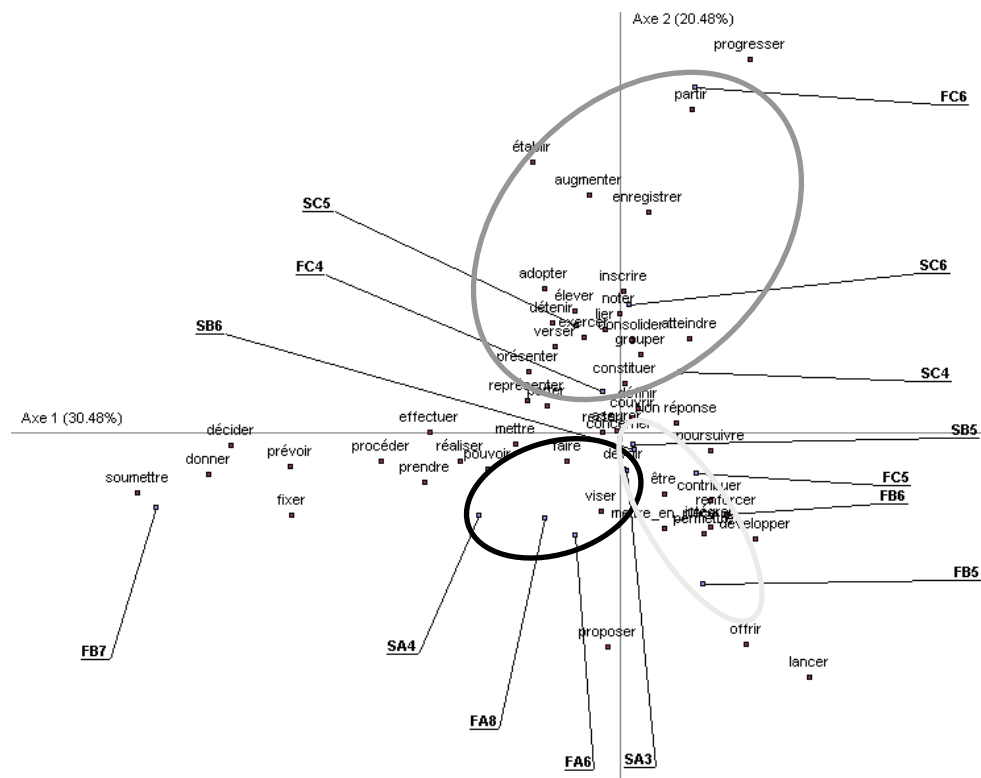
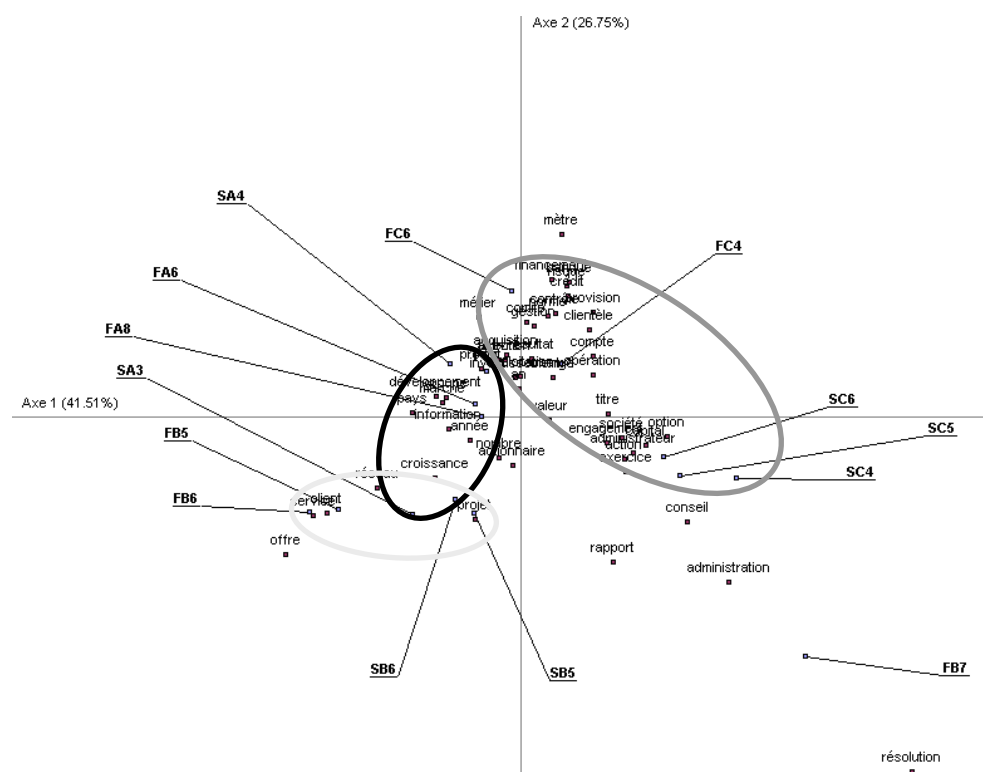


Fig. 6: factorial analysis of verbs

If we do not consider FB7, FC4 and FC5 texts which raise problem as we saw previously, according to the figure 6, the texts of companies A (in black) and B (in light grey) are positioned under the axis 1, on both sides of the axis 2, and those of C (in dark gray) are positioned over the axis 1.

A detailed analysis shows that the speech of the company B builds its speech by making reference to the customer, to the proposed services and by using mainly verbs sending back to the linguistic transcription of an action, ie “factive” verbs according to Rodolphe Ghiglione's classification (on 1991: 41). This last one indeed sees in the verbs of the determining elements in the stage setting of the linguistic elements. He{*it*} classifies the verbs in three categories:

The speech of the company A is strongly directed to the notion of development, and uses mainly stative verbs.



There exist indeed a vocabulary, expressions, terminology, speech appropriate to the corporate culture and it is possible to differentiate significantly texts stemming from internal documents, conveying the corporate culture from a company to another one and this is proved by the lexicostatistics analysis.

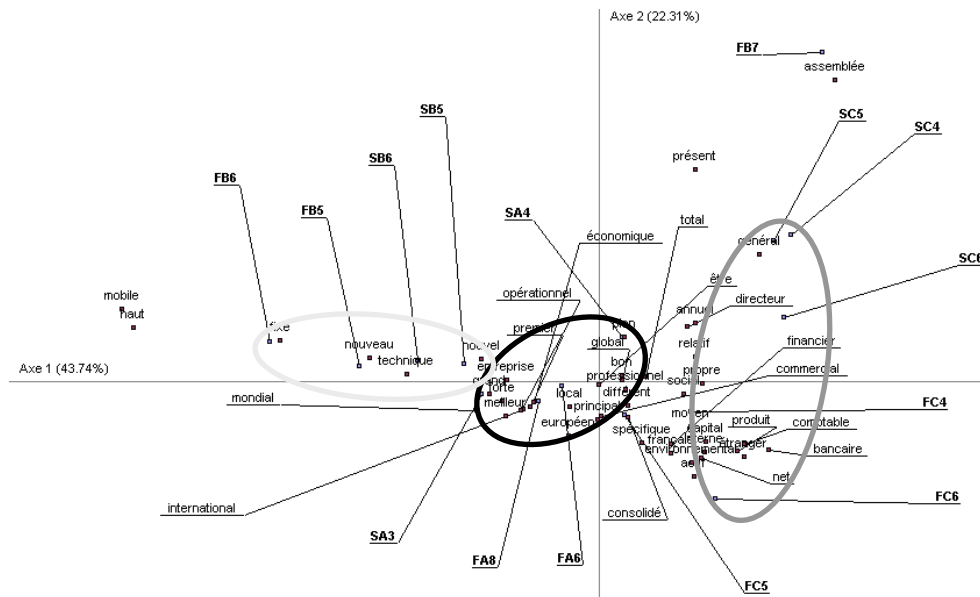


Fig. 8: factorial analysis of adjectives

We try henceforth to refine our analysis as for the influence of the local culture on the corporate culture.

Lexical intensity

The lexical intensity allows to measure the weight of a shape within a statistical unity. Here, we are interested in the percentage of various words within texts. We established two lists of words from the studies of Martin J. Gannon (on 2004) on the cultural metaphors which he defines as « any activity, phenomenon, or institution which members of a given culture consider important and with which they identify emotionally and/or cognitively » (Gannon on 2004 : XIII). Martin J. Gannon allows to understand and to assess the French culture by the cultural metaphor of French wine. He has not studied, on the other hand, Senegal. After discussing with French people close to Senegalese, and having lived in Senegal, the cultural metaphor which seems the most relevant to understand and assess Senegal is Senegalese Teranga, a real tradition of welcome and pleasure to receive.

JALON	TEXTE_vinfr_I	JALON	TEXTE_pla ceséné3_I
FA8	1,09	SB6	1,68
FB5	0,94	SA3	1,68
FC4	0,91	SA4	1,24
FC5	0,85	SB5	1,19
FB6	0,82	SC5	0,92
FB7	0,65	FB7	0,80
SB6	0,54	SC6	0,76
FA6	0,49	SC4	0,76
FC6	0,45	FB6	0,49
SB5	0,39	FB5	0,47
SC4	0,35	FA6	0,45
SA3	0,33	FC4	0,36
SC5	0,32	FC5	0,33
SA4	0,18	FA8	0,25
SC6	0,16	FC6	0,09
TOTAL	0,79	TOTAL	0,54

Fig. 9: lexical intensity and local culture (on the left, the list of words relating to the French cultural metaphor, on the right, of that relating to the Senegalese cultural metaphor)

The figure 9 above lists the lexical intensities of the words composing the cultural metaphors of the concerned countries and shows that :

- the words associated to the cultural metaphor of the French wine are sub-represented (framed red) in the Senegalese texts, and present or even overrepresented in the French texts ;
- the words associated to the cultural metaphor of the Senegalese teranga are present and overrepresented in the Senegalese texts, and sub-represented in the French texts, with the exception of the text FB7 which, as we saw previously, in one cut diverse with regard to the other texts of the corpus.

Thus we verify the initial hypotheses stipulating that it is possible to discriminate between texts stemming from internal communication documents of a French company and those of its subsidiary located in Senegal. We also show that the local culture does influence in a significant way the corporate culture and the speech conveying the values nevertheless common to the company, as for France and for Senegal. We can expect to make similar observations for the other countries and afterward wish to spread our researches to the countries of 3A, Africa, Latin America, Asia. The problem which will arise then is that of the language.

Conclusion

The cultural values add up to the proper values of the corporate culture to give us the corporate culture. We consider that the corporate culture contains one part common to all the companies of the same company and one part linked to each company (Ben Fadhel 2008: 6).

As for France and for Senegal, we have identified, on the one hand, in written internal documents companies, lexical characters common to the same company (mother firm and its subsidiaries). These common elements are the reflection of the corporate culture. We have identified, on the other hand, in the internal written documents of the same company, lexical characters common to a country. These common

elements are the reflection of the local culture.

These differences convey values, traditions, customs, ways of thinking and of expressing oneself appropriate for each culture. The corporate culture is not only a set of collective representations situated in mind of the members of the company but also expresses the identity, national or local cultural differences, within multinational companies. Our interpretation has shown the importance of the cultural metaphors in Martin J. Gannon's sense. The values conveyed by the cultural metaphor of the French wine turn around joy of living, friendship, romanticism, perfection, pride, greatness, prestige, complexity... Those conveyed by the Senegalese teranga are bound to reception, hospitality, rurality, sharing, trade. These cultural differences are obvious in texts although these also reflect the same values of the same corporate culture.

The limits of our study depend on the difficulty of retrieving the data sources, but mostly on the language barrier. These are two hardships that we will have to overcome in order to pursue our comparisons and spread our analyses to the other countries of Africa, Latin America and Asia (country of 3A).

List of figures

Fig. 1: composition of the corpus p02

Fig. 2. Stages of the lexicométrique analysis p04

Fig. 3: histogram of lexical wealth of the corpus p06

Fig. 4: oblong representation of the analysis raised by the lexical distances on the occurrences p07

Fig. 5: histogram of the area{ *extent* } of the texts of the corpus p08

Fig. 6: factorial analysis of the verbs p08

Fig. 7: factorial analysis of names p09

Fig. 8: factorial analysis of adjectives p10

Fig. 9: lexical intensity and local culture (to leave, to the left, the list of words relating to the French cultural metaphor, to the right, of that relating to the Senegalese cultural metaphor) p11

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